Cost-Effectiveness of National Diabetes Prevention Program (NDPP)

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Background Information about Prediabetes and the National Diabetes Prevention Program

- An estimated 1 in 3 adults in the U.S. and Iowa have prediabetes, according to the Centers for Disease Control and Prevention (CDC). 9 out of 10 people with prediabetes don't know they have it.
- The National Diabetes Prevention Program (NDPP) is an evidence-based and cost-effective lifestyle change program that is a year-long. It consists of group-based classes, taught by a trained lifestyle coach, that begin by meeting weekly and then transition to meeting monthly. A list of NDPP sites in Iowa is available at http://bit.ly/NDPPinIA
- The Diabetes Prevention Program is the clinical trial NDPP is based on. This clinical trial showed, among those with prediabetes, a 58 percent reduction in the number of new cases of diabetes overall and a 71 percent reduction in new cases for those over age 60 compared to placebo (National Diabetes Education Program, 2011).

Cost Effectiveness and Cost Savings

- A cost-savings calculator for insurers and employers for providing NDPP as a covered benefit is available here: https://ama-roi-calculator.appspot.com/
- NDPP is cost effective. Group-based diabetes prevention programs have a median cost of $1,819 per quality-adjusted life-year (Li et al., 2015).

Quotes from the literature:

- "Over 10 years, from a payer perspective, lifestyle was cost-effective and metformin was marginally cost-saving compared with placebo. Investment in lifestyle and metformin interventions for diabetes prevention in high-risk adults provides good value for the money spent" (The Diabetes Prevention Program Research Group, 2012).
- "Preventing diabetes, in particular by lifestyle modification, is not only effective but also a very efficient use of health care resources" (Li et al., 2010).
- "Diet and physical activity promotion programs to prevent type 2 diabetes are cost-effective among persons at increased risk. Costs are lower when programs are delivered to groups in community or primary care settings" (Li et al., 2015).
- "The return-on-investment break-even point was 3 years... Simulated return on investment for the population with prediabetes was $9 and $1,565 at years 3 and 5, respectively. Simulated return on investment for the population with cardiovascular disease risk was $96 and $1,512 at years 3 and 5, respectively" (Su et al., 2016).
- "We estimate this proposal [for Medicare to cover NDPP participation] would reduce federal spending by $1.3 billion over the 2015-2024 federal budget window" (Avalere Health, 2014).

Works Cited

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